

Docket No. DP-302561

**REMARKS**

Claims 1, 4-16, 19, 20, 24-29, and 31 are pending in the present application. Claims 15, 20 and 25-29 are allowed and Claim 24 is amended, leaving Claims 1, 4 -- 14, 16, 19, 24, and 31 for consideration upon entry of the present Amendment.

Support for the amendment to Claim 24 can at least be found in Claim 1. This amendment does not add new matter or require additional search. The matter included in Claim 24 has been searched in relation to Claim 1.

Reconsideration and allowance of the claims is respectfully requested in view of the above amendment and the following remarks.

Claim Rejections Under 35 U.S.C. § 102(e)

Claims 1, 4-14, 16, 24, and 31 continue to stand rejected under 35 U.S.C. § 102(e), as allegedly anticipated by U.S. Patent No. 6,518,213 to Yamamoto et al. (hereinafter "Yamamoto"). Applicants respectfully traverse this rejection.

First, Applicants traverse the rejection on the grounds that Yamamoto is not a 35 U.S.C. § 102(c) reference. Applicants conceived the present invention prior to July 14, 2000 and diligently reduced the invention to practice. Applicants reserve the right to later submit a declaration under 37 CFR 1.131.

Second, the above argument is moot because Yamamoto does not anticipate the present claims. The present claims are directed to a catalyst for treating an exhaust gas stream. Present claims have *an outer layer* comprising at least about 50 weight percent of an alkaline earth component. Present Claim 1, for example, is directed to a catalyst comprising a NO<sub>x</sub> occluding catalyst structure comprising an alkaline earth exchanged zeolite and having an outer layer comprising at least about 50 weight percent of an alkaline earth component, and not more than about 42 weight percent of a rare earth component.

Yamamoto teaches a catalyst comprising a hydrocarbon adsorbent layer (A) coated with a metal-based catalyst layer (B) in which *both layers* contain an alkaline earth metal (Abstract). In making the rejection, the Examiner alleges that "the overlayer contains 60% or more alkaline earth" and 1 -- 40% rare earth by citing Col. 11, lines 54-57 and Col. 6, lines 52

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- 55 (Final Office Action dated October 22, 2003 (hereinafter Final OA), Page 2). Applicants respectfully disagree with the Examiner's reading of Yamamoto.

In Col. 11, lines 54-57 of Yamamoto, it is stated that "[a]s is shown in Table 1... the catalysts prepared by EXAMPLEs # 1 to #11 contain 60 weight % or more of all addition amount of Ba (alkaline earth metal) in the metal based layers (overlying layer)...". In order to understand this statement, therefore, one must refer to Examples 1 to 11 as well as Table 1. Table 1 shows that the metal-based catalyst layer comprises anywhere from 0 % (Comparative Example 1) to 100 % of the Ba in the metal-based layer. However, the actual amount of Ba in the layer, based upon the weight of the layer is not discussed. The relevant portion of Table 1 is produced below. Also included is a conversion to show an approximate amount of alkaline earth metal in the metal-based catalyst layer.

Example	Alkaline or alkaline earth metal salt in metal-based catalyst layer (g/L)	Total amount of metal-based catalyst layer (g/L)	Percentage of alkaline earth metal in the metal-based catalyst layer
1	24	150	16 wt%
2	27	150	18 wt%
3	18	150	12 wt%
4	10	150	6.7 wt%
5	24	150	16 wt%
6	16	150	10.7 wt%
7	24	150	16 wt%
8	21	150	14 wt%
9	24	150	16 wt%
10	13	150	8.7 wt%
11	12	150	8.0 wt%
Comparative #1	0	150	0 wt%
Comparative #2	3	150	2 wt%

As is clear from the above Table, the total weight of the metal-based catalyst layer was 150 g/L (see Col. 9, lines 9 – 11) and the maximum amount of an alkaline earth salt in the metal-based catalyst overlayer was less than 20 weight percent. In other words, based upon the amount taught by Yamamoto, when the actual amount of Ba in the overlayer is determined, it is significantly below the presently claimed amount of 50 weight percent.

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Yamamoto state that "EXAMPLEs # 1 to #11 contain 60 weight % or more of *all addition amount of Ba* (alkaline earth metal) in the metal based layers (overlying layer)..." (Col. 11, lines 55 – 57; *emphasis added*). In other words, the weight percentage that Yamamoto is providing is based only on the weight of the Ba. Yamamoto is comparing the amount of Ba in the IIC adsorbent layer to the metal-based catalyst layer. Yamamoto do not specifically set out the amount of Ba in the overlayer, *based upon the weight of the over layer*. To understand the amount of Ba in the metal-based catalyst layer of Yamamoto, the amount must be calculated from the information in Table 1 as well as in the Examples. In other words, Yamamoto does not discuss an outer layer comprising at least 50 wt% alkaline earth metal.

Yamamoto is concerned with the ratio of Ba in one layer versus the other layer. Therefore, when Yamamoto claim "a weight ratio of the second component contained in the metal-based catalyst layer to the second component contained in the hydrocarbon adsorbent layer is set to 60:40 to 99:1", they are determining the ratio of Ba to Ba (in one layer versus another layer). Yamamoto is not claiming that the amount of Ba in a particular layer is 60 wt%, but is stating that 60% of the Ba in the two layers is in the metal-based catalyst layer. In other words, if the total weight percent of Ba in the two layers is 20 wt%, then 12 wt% would be in the metal-based catalyst layer and 8 wt% would be in the HC adsorbent layer. Yamamoto does not teach having at least about 50 wt% of an alkaline earth metal in the outer layer as is taught and claimed in the present application.

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987). Applicants claim: "an outer layer comprising at least about 50 weight percent of an alkaline earth component". Therefore, as the Examiner states "Applicant[s] claim[] a percent 'of an alkaline earth metal'." (Final OA, page 5) This "percent of alkaline earth metal" is the percent *in the outer layer*. As is shown and explained in detail above, Yamamoto does not teach a catalyst having an outer layer comprising at least about 50 weight percent of an alkaline earth component. Because Yamamoto is missing at least this element of the present claims, Yamamoto does not anticipate present claims. Reconsideration and withdrawal of this rejection are requested.

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Allowable subject matter

Claim 19 stands objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. In view of the foregoing arguments, Applicants decline to amend Claim 19 at this time.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and withdrawal of the rejection and objection, and allowance of the case are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Cantor Colburn LLP.

Respectfully submitted,

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